

**ABSTRACT**

A method for estimation and control of concentrations of pollutant gases at a discharge of a gas turbine. The method includes receiving a plurality of signals corresponding to data relating to an operating state of the gas turbine, where the data includes a rotation speed of a shaft, a temperature of a discharge at the gas turbine, and a temperature of the environment, processing in a processor the data, and evaluating emissions into the atmosphere from the gas turbine based on the processed data and without using in-line analyzers.